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| 10/550,337 | 09/22/2005 | Richard J. Caldwell | GB 030028 | 1260 |

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| EXAMINER |
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AKBAR, MUHAMMAD A

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| ART UNIT | PAPER NUMBER |
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2618

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06/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/550,337

Applicant(s)

CALDWELL ET AL.

Examiner

Muhammad Akbar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/20/2007.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Objection

1. Claims 2-14, 16-26 and 28 are objected to because of the following informalities: regarding claim 2-14, the phrase "A method" appears to be "The method". Claims 16-26 and 28, the phrase "A policing" appears to be "The policing". Appropriate correction is required.
2. Claim 21 is objected to under 37 CFR 1.75 (c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP 608.01(n). Claim 21 recited "as claimed in claim 21" which is depended itself. The examiner believed claim 21 was intended to depend on claim 20 and has been treated as such for the remainder of this Office action. Appropriate correction is required.
3. Re claim 28, recited as " a wireless network....policing terminal as claimed in any claim 15". But mentioned only claim 15, therefore, examiner believed it is a typo and "any" should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

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ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd et al (WIPO Pub. No. WO 01/31960) and in view of Iliadis (US patent no. 6,968,157 B2).

Re claim 1, Shepherd discloses a method and apparatus for transmission restriction of portable radio device (see title) wherein protecting an apparatus from radio transmission signal in a predetermined radio frequency band (Bluetooth radio

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transceiver operates frequency band 2.4 GHz), comprising: a portable computer 2 carries second Bluetooth unit 4 (see fig.1) i.e. a policing terminal (PT) which suppress radio frequency within a range, detecting the presence of Bluetooth compatible radio transceiver in computer unit 3 [i.e. a radio terminal] operable to modify inquiry response (i.e. generate) message i.e. interference signal in the predetermined radio frequency band in accordance with a inquiry message [i.e. first predetermined signaling protocol]; and transmitting special message with designated device address to suspend transmission and inquiry signal (first signal) matched to a characteristic of the first predetermined signaling protocol, wherein, in response to receiving the first signal by the computer 1 (radio terminal) is suspended as a source of interference (see abstract, fig.1 and 2 and 3, steps 8-15 and page 6 lines 25-30 and page 7 lines 1-12).

But Shepherd failed to disclose explicitly that device is protected from radio frequency interference signal. However, Iliadis teaches a system and method for protecting device from radio frequency interference (same field of endeavor) in a predetermined radio frequency band (see fig.1, Title and abstract) comprising: interference signal entrance detecting port (16 of ifg.1) i.e. a policing terminal (PT), upon detecting the presence of a radio interference signal by the sensing elements(30 and 32 of fig. 1) and operable to generate outputs signal as an interference(see col.6 lines 35-45);

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the protecting device from unwanted transmission signal wherein host terminal transmitting and receiving a signal for

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suspending the transmission message by the interference terminal (as taught by Shepherd) to incorporate the teaching of protecting device from interference signals (as taught by Iliadis) to improve security system by disabled of unwanted interference signals in a communication system.

Re claim 2, as discussed above with respect to claim 1, Shepherd further teaches detecting the presence of the electronics device (computer unit 2 of fig. 1) i.e. radio terminal comprises detecting a second signal (at step S3) transmitted by the (first unit 3 of fig. 2) i.e. radio terminal in accordance with the first inquiry response i.e. first predetermined signaling protocol (see fig. 2,3 and page 2 lines 1-15).

Re claim 3, as discussed above with respect to claim 2, Shepherd furthermore teaches transmission of the page response at step S3 [i.e. second signal] is responsive to a third signal transmitted by the second unit 4 i.e. policing terminal (see fig.4 lines page 6 lines 1-12).

Re claim 4, as discussed above with respect to claim 1, Shepherd furthermore teaches the inquiry signal transmitted by the first unit 3 (fig. 2) i.e. first signal matched to a characteristic of the inquiry response message by the second unit 4 (see fig 2) i.e. first predetermined signaling protocol comprises a message with designated address to selected from the first predetermined signaling protocol (see fig.2,3, page 7 lines 1-10).

Re claim 5, as discussed above with respect to claim 4, Shepherd furthermore teaches the message is a command to suspend (i.e. disconnect) from a communication (see fig.3, page 7 lines 3-7).

Re claim 6, as discussed above with respect to claim 1, Shepherd furthermore teaches the matching of the inquiry signal (first signal) to a characteristic of the (inquiry response signal (first predetermined signaling protocol) comprises timing period the transmission of the first signal to interfere with at least a portion of a transmission made by the computer 1 i.e. radio terminal in accordance with the modified inquiry response message (first predetermined signaling protocol) (see fig. 2 ,3 and page 7 lines 1-10) .

Re claim 7, as discussed above with respect to claim 6, Shepherd furthermore teaches the portion is at least one of a control packet that includes information relating data i.e. preamble, synchronization word, device address field or header field (see page 6 lines1-9).

Re claim 8, as discussed above with respect to claim 4, Shepherd furthermore teaches the inquiry response signal i.e. first predetermined signaling protocol is a networking protocol, the computer 2 Bluetooth enable terminal i.e. the policing terminal is equipped to operate in accordance with the inquiry and inquiry response signal i.e. first predetermined signaling protocol, and the computer 2 i.e. policing terminal joins a network comprising the computer 1 Bluetooth enable terminal i.e. radio terminal prior to

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transmitting the message (see fig. 1,2 and page 5 lines 20-28).

Re claim 9, as discussed above with respect to claim 8, Shepherd furthermore teaches the method can be used in several devices by establishing piconet networking system and the computer 2 Bluetooth enable terminal e.g policing terminal becomes a master station in the piconet network prior to transmitting the message (see page 5 ines 1-6).

Re claim 10, as discussed above with respect to claim 2, Shepherd furthermore teaches detecting the presence of the computer 1 Bluetooth enable terminal i.e. radio terminal comprises detecting from the inquiry response message i.e. second signal that contain address of the computer 2 (see fig. 2 and page 5 lines 26-29).

Re claim 11, as discussed above with respect to claim 2, Shepherd furthermore teaches detecting the presence of the electronics device (computer unit 1) i.e. radio terminal comprises determining a frequency channel hopping sequence is used by the by the first computer unit 3 i.e. radio terminal (see fig.2 page 6 lines 5-8).

Re claim 12, as discussed above with respect to claim 6, Shepherd furthermore teaches the inquiry signal (first signal) convey the specified message (see page 5 lines 21-25); and Iliadis further teaches the detecting interference signal modulated with noise by the low noise amplifier (see fig.1 and col.5 line 49-53).

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Re claim 13, as discussed above with respect to claim 1, Shepherd furthermore teaches the computer 2 Bluetooth enable terminal i.e. policing terminal is component of apparatus to be protected in a restricted area.(see fig. 1 and page 6 lines 25-30).

Re claim 14, as discussed above with respect to claim 1, Shepherd furthermore teaches the computer 1 Bluetooth enable terminal and mobile station MS7 (another apparatus) are equipped o operate in accordance with a second predetermined (Bluetooth enable 2.4GHz frequency band) signaling protocol(see fig. 1,5 and page 5 lines 1-6,page 10 lines 1-3).

Re claim 15, Shepherd discloses a computer unit 2 Bluetooth enable terminal (see fig.1) i.e. a policing terminal for transmission restriction from portable radio device (see title) wherein protecting an apparatus from radio transmission signal in a predetermined radio frequency band (Bluetooth radio transceiver operates frequency band 2.4 GHz), comprising: detecting the presence of Bluetooth compatible radio transceiver in computer unit 3 [i.e. a radio terminal] operable to modify inquiry response (i.e. generate) message i.e. interference signal in the predetermined radio frequency band in accordance with a inquiry message [i.e. first predetermined signaling protocol]; and transmitting special message with designated device address to suspend transmission and inquiry signal (first signal) matched to a characteristic of the first predetermined signaling protocol, wherein, in response to receiving the first signal by

the computer 1 (radio terminal) is suspended as a source of interference (see abstract, fig.1 and 2 and 3, steps 8-15 and page 6 lines 25-30 and page 7 lines 1-12).

But Shepherd failed to disclose explicitly that device is protected from radio frequency interference signal. However, Iliadis teaches a system and method for protecting device from radio frequency interference (same field of endeavor) in a predetermined radio frequency band (see fig.1, Title and abstract) comprising: interference signal entrance detecting port (16 of ifg.1) i.e. a policing terminal (PT), upon detecting the presence of a radio interference signal by the sensing elements(30 and 32 of fig. 1) and operable to generate outputs signal as an interference(see col.6 lines 35-45);

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the protecting device from unwanted transmission signal wherein host terminal transmitting and receiving a signal for suspending the transmission message by the interference terminal (as taught by Shepherd) to incorporate the teaching of protecting device from interference signals (as taught by Iliadis) to improve security system by disabled of unwanted interference signals in a communication system.

Re claim 16, as discussed above with respect to claim 15, Shepherd further teaches detecting the presence of the electronics device (computer unit 2 of fig. 1) i.e. radio terminal comprises detecting a second signal (at step S3) transmitted by the (first

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unit 3 of fig. 2) i.e. radio terminal in accordance with the first inquiry response i.e. first predetermined signaling protocol (see fig. 2,3 and page 2 lines 1-15).

Re claim 17, as discussed above with respect to claim 16, Shepherd furthermore teaches transmission of the page response at step S3 [i.e. second signal] is responsive to a third signal transmitted by the second unit 4 i.e. policing terminal (see fig.4 lines page 6 lines 1-12).

Re claim 18, as discussed above with respect to claim 15, Shepherd furthermore teaches the inquiry signal transmitted by the first unit 3 (fig. 2) i.e. first signal matched to a characteristic of the inquiry response message by the second unit 4 (see fig 2) i.e. first predetermined signaling protocol comprises a message with designated address to selected from the first predetermined signaling protocol (see fig.2,3, page 7 lines 1-10).

Re claim 19, as discussed above with respect to claim 18, Shepherd furthermore teaches the message is a command to suspend (i.e. disconnect) from a communication (see fig.3, page 7 lines 3-7).

Re claim 20, as discussed above with respect to claim 15, Shepherd furthermore teaches the matching of the inquiry signal (first signal) to a characteristic of the (inquiry response signal (first predetermined signaling protocol) comprises timing period the transmission of the first signal to interfere with at least a portion of a transmission made

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by the computer 1 i.e. radio terminal in accordance with the modified inquiry response message (first predetermined signaling protocol) (see fig. 2 ,3 and page 7 lines 1-10)

Re claim 21, as discussed above with respect to claim 20, Shepherd furthermore teaches the portion is at least one of a control packet that includes information relating data i.e. preamble, synchronization word, device address field or header field (see page 6 lines1-9).

Re claim 22, as discussed above with respect to claim 18, Shepherd furthermore teaches the inquiry response signal i.e. first predetermined signaling protocol is a networking protocol, the computer 2 Bluetooth enable terminal i.e. the policing terminal is equipped to operate in accordance with the inquiry and inquiry response signal i.e. first predetermined signaling protocol, and the computer 2 i.e. policing terminal joins a network comprising the computer 1 Bluetooth enable terminal i.e. radio terminal prior to transmitting the message (see fig. 1,2 and page 5 lines 20-28).

Re claim 23, as discussed above with respect to claim 22, Shepherd furthermore teaches the method can be used in several devices by establishing piconet networking system and the computer 2 Bluetooth enable terminal e.g policing terminal becomes a master station in the piconet network prior to transmitting the message (see page 5 lines 1-6).

Re claim 24, as discussed above with respect to claim 16, Shepherd furthermore teaches detecting the presence of the computer 1 Bluetooth enable terminal i.e. radio terminal comprises detecting from the inquiry response message i.e. second signal that contain address of the computer 2 (see fig. 2 and page 5 lines 26-29).

Re claim 25, as discussed above with respect to claim 16, Shepherd furthermore teaches detecting the presence of the electronics device (computer unit 1) i.e. radio terminal comprises determining a frequency channel hopping sequence is used by the by the first computer unit 3 i.e. radio terminal (see fig.2 page 6 lines 5-8).

Re claim 26, as discussed above with respect to claim 20, Shepherd furthermore teaches the inquiry signal (first signal) convey the specified message (see page 5 lines 21-25); and Iliadis further teaches the detecting interference signal modulated with noise by the low noise amplifier (see fig.1 and col.5 line 49-53).

Re claim 27, as discussed above with respect to claim 15, Shepherd furthermore teaches the computer 2 Bluetooth enable terminal i.e. policing terminal is component of apparatus to be protected in a restricted area.(see fig. 1 and page 6 lines 25-30).

Re claim 28, as discussed above with respect to claim 15, Shepherd furthermore teaches the computer 1 Bluetooth enable terminal and mobile station MS7 (another apparatus) are equipped o operate in accordance with a second predetermined

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(Bluetooth enable 2.4GHz frequency band) signaling protocol(see fig. 1,5 and page 5 lines 1-6,page 10 lines 1-3).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (7.96)

The following patent are cited to further show the state of the art with respect to clips and bookmarks in general:

U.S. Patent No. 7,046,990 to Grego et al teaches method for detecting access to controlled area and related system.

U.S. Patent No. 6,222,458 to Harris teaches automatic cell phone detection at combustible delivery station.

U.S. Patent No. 6,377,608 to Zyren teaches pulsed beacon based interference reduction mechanism for wire less communication network.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Muhammad Akbar whose telephone number is (571)-270-1218. The examiner can normally be reached on Monday- Thursday (7:30 A.M.- 5:00P.M). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MA

EDAN ORGAD
PRIMARY PATENT EXAMINER

Edan Orgad 6/10/07